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16004-0022

Hylebos NRDA Settlement Proposal Comments NOAA Damage Assessment and Restoration Center NW 7600 Sandpoint Way NE Seattle, WA 98115-0070

Attn: Gail Siani

Re: Hylebos Waterway Natural Resource Damage Settlement Proposal Report

Dear Gail:

Submitted with this letter are Asarco's comments regarding the above-referenced report ("Settlement Proposal"). Initially, Asarco would like to commend the Trustees in their effort to achieve settlement to avoid costly and protracted litigation. Asarco is optimistic that the Settlement Proposal will achieve its goal of a waterway-wide natural resource damage settlement if the Trustees seriously consider valid scientific and technical comments submitted during this comment period.

If the Trustees have any questions regarding the enclosed comments, please telephone the undersigned at (206) 389-6212.

Very truly yours,

Kimberly A. Seely

Enclosures

ASARCO INCORPORATED COMMENTS RE HYLEBOS WATERWAY NATURAL RESOUCE DAMAGE SETTLEMENT PROPOSAL REPORT

Below are Asarco's comments on the Trustees draft Hylebos Waterway Natural Resource Damage Settlement Proposal Report ("Settlement Proposal"), dated March 2002.

1. <u>Assignment of multipliers to increase non-Trustee data is not technically</u> valid and results in biased data.

The Trustee's presumption that their data are superior to that of the HCC is not technically valid. The widely accepted quality control method used by the Trustees, Standard Reference Method 1941("SRM 1941"), was independently established by the National Institute of Standards and Technology (NIST). Under SRM 1941, the analysis of a certified standard reference material must be compared to a mean and fall within a 95% confidence level. However, the Trustees' exceeded the mean plus the 95% confidence limit by up to 43.8%. Rather than correcting their methodology in accordance with valid quality control standards, the Trustees arbitrarily expanded the confidence limits to fit their own data (95% plus or minus 35%). Thus, because NMFS assessed their data against the manipulated confidence limits, the Trustees' data are biased high. Accordingly, since the Trustee data do not meet quality control standards and HCC data do, it is the HCC data that are valid. Thus, the multipliers applied to HCC data must undoubtedly be removed; including the 1.1 multiplier applied to metals data.

Once the multipliers are removed from HCC data, most if not all injury levels require adjustment. Eliminating the 1.1 multiplier from HCC metals data, results in adjustment of several metal injury levels. For example, without the multiplier, 8 arsenic stations are no longer assigned any injury level and two others receive a reduced level of injury for arsenic. Similar results occur as to chromium, mercury, cooper, lead, antimony and zinc.

2. The Settlement Proposal mistakenly employs the bivalve AET as a basis for service loss.

The Trustees should not use the bivalve AET as a basis for service loss as it has never gone through the necessary technical evaluation for use in any regulatory context. In fact, EPA did not consider the bivalve AET in establishing the ROD cleanup standards and neither did the state in developing sediment management standards. Furthermore, it is well documented that where an AET is based on a small sample size, as in the case of the bivalve AET, the AET is

usually biased low. Because, the bivalve AET is scientifically suspect, its use by the Trustees undermines the creditability of their analyses. Consequently, Asarco recommends that the Trustees consider only AETs that have undergone thorough evaluation and have been adopted as standards.

The erroneous use of the bivalve AET affects the service loss calculations primarily for Antimony, Chromium and Silver. For instance, it accounts for 34 of the 79 stations assigned service losses for antimony and elevates the assigned service losses for the 3 silver stations. These service losses and any other service loss based on the bivalve AET require adjustment.

3. The Settlement Proposal must consider HCC bioassay data from Hylebos Waterway Stations.

At the request of EPA, the Science Advisory Board ("SAB"), in 1988, critiqued the AET methodology being considered at that time by EPA and Ecology as a basis for their respective sediment cleanup levels. After considerable evaluation, the SAB concluded that the validity of AETs was limited since AET methodology did not and could not 1) establish cause and effect relationships; 2) properly consider bioavailability; or 3) compensate for varying mixtures of sediment chemistry. Consequently, as recommended by the SAB, the state and EPA both choose to use site-specific bioassay data to override their respective AET-based cleanup levels. In sharp contrast, the Trustees disregard the findings of the SAB, EPA and Ecology, disregard site-specific bioassay data, and rely only on inaccurate AETs to determine threshold injury levels. Such inaccuracies must be remedied to realize any scientific validity for injury threshold levels.

If the Trustees were to appropriately consider bioassay data, threshold injury levels would differ considerably. During HCC investigations of Hylebos Waterway sediments, abundant bioassay data were collected. In many cases all species tested passed where sediment chemistry was above and often well above AET-based cleanup standards. The fact that these sediments pass site-specific bioassay tests demonstrates that the AETs applied there are too stringent. Accordingly, these results refute assigned threshold injury levels which assert that some or all benthic invertebrates are affected. Moreover, even those sediment stations that pass one or more of the bioassay tests refute injury assignments asserting that all benthic invertebrates are affected. Accordingly, a significant number of threshold injury levels require adjustment to reflect valid site-specific data. Without such corrections, the credibility of the Settlement Proposal will be greatly impaired.

4. Corrections based on the above comments are demonstrated below.

The Table below illustrates adjustments to service losses at stations of interest to Asarco that result from the modifications recommended above. Service losses at the stations referenced below are corrected to 1) incorporate available bioassay data for those stations; 2) remove the 1.1 multiplier; and 3) eliminate use of the bivalve AET as a basis for assigning losses. The effect of these corrections is as follows:

<u>Station</u>	Metal A	ssigned loss	Corrected loss	Reason(s)
4207	Silver Cadmium	15% 5%	10% 0%	delete bivalve AET delete 1.1 factor
4119	Zinc	10%	0%	pass all bioassays
3206	Copper Antimony	15% 5%	0% 0%	pass all bioassays pass all bioassays
3211	Arsenic	5%	0%	pass all bioassays
1208	Arsenic Antimony	10% 10%	0% 0%	pass all bioassays pass all bioassays

5. The spatial analysis of contaminant injury footprints incorrectly projects intertidal metal impacts into deeper water.

When offshore stations refute a distribution, gaps in the offshore stations are used to project lobes of contamination into deeper waters towards areas where nearby offshore stations do not exist. This creates an unreasonable lobate pattern that exaggerates the area of impact. This also shows up in the figures for grain size contours as well (Figure 10-4 in Appendix E). It is especially relevant to metals which often are in a dense particulate form (such as slag particles) that does not easily move around. Examples of exaggerated footprints resulting from lobes extended into areas where offshore stations are distant include: Ag1, Ag2, As11, Cd4, Cu3, Cu7, Cu11, Pb2, Pb4, Pb5, Sb4, Sb7, Sb12, Zn4, Zn7, Zn11, Zn12 and Zn15. These unusual distributions are simply artifacts of the mapping methodology, have no valid basis, and result in excessive DSAY allocation for metals.